Report Date: January 13, 2016

Priority 1 Species of Greatest Conservation Need (SGCN)

Class: Actinopterygii (Ray-finned Fishes)

Order: Salmoniformes (Salmon, Trout, And Whitefish)

Family: Salmonidae (Salmonids)

General comments: none

Species Conservation Range Maps for Arctic Charr:

Town Map: <u>Salvelinus alpinus oquassa_Towns.pdf</u>
Subwatershed Map: <u>Salvelinus alpinus oquassa_HUC12.pdf</u>

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation: NA

State Special Concern or NMFS Species of Concern: NA

Recent Significant Declines: NA

Regional Endemic:

Salvelinus alpinus oquassa's global geographic range is at least 90% contained within the area defined by USFWS Region 5, the Canadian Maritime Provinces, and southeastern Quebec (south of the St. Lawrence River).

Notes:

Bernatchez et. Al. 2002. Microsatellite Gene Diversity Analysis in Landlocked Arctic Char from Maine. TAFS 131:1106-1118. \\oit-teagfsemc11.som.w2k.state.me.us\ifw-common\2015ActionPlan\References\Fish References\Bernatchez_TAFS_
02ArcticCharrGeneticDiversity.pdf

High Regional Conservation Priority:

American Fisheries Society, Endangered Species Committee:

Status: Threatened, Trend: same, Listing: 134, Global Rank: G5T2Q, Comment: blueback trout

High Climate Change Vulnerability: NA

Understudied rare taxa: NA

Historical: NA

Culturally Significant: NA

Habitats Assigned to Arctic Charr:

Formation Name Freshwater Aquatic

Macrogroup Name Lakes and Ponds

Habitat System Name: Mesotrophic or Intermediate

Habitat System Name: Oligotrophic **Primary Habitat**

Stressors Assigned to Arctic Charr:

Stressor Priority Level based on Severity and Actionability

	Moderate Severity	High Severity
Highly Actionable	Medium-High	High
Moderately Actionable	Medium	Medium-High
Actionable with Difficulty	Low	Low

IUCN Level 1 Threat Residential and Commercial Development

IUCN Level 2 Threat: Tourism and Recreational Areas

Severity: Moderate Severity Actionability: Highly actionable

Notes: Deboullie populations and Enchanted Pond

Report Date: January 13, 2016

Priority 1 Species of Greatest Conservation Need (SGCN)

Class: Actinopterygii (Ray-finned Fishes)

Order: Salmoniformes (Salmon, Trout, And Whitefish)

Family: Salmonidae (Salmonids)

IUCN Level 1 Threat Natural Systems Modifications

IUCN Level 2 Threat: Dams and Water Management-Use

Severity: Moderate Severity Actionability: Moderately actionable

Notes: Floods Pond population only - currently adequately mitigated but will always remain a public water supply.

IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Agricultural and Forestry Effluents

Severity: Moderate Severity **Actionability:** Moderately actionable

Notes: Potential spruce budwork mitigation could pose risks to some charr habitats. Requires cooperation with Forestry

and landowners to minimize impacts to charr habitats.

IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Temperature Extremes

Severity: Moderate Severity Actionable with difficulty

Notes: Potential climate change effect - charr are susceptible to increasing temps and stressed at high temps over

extended periods.

IUCN Level 1 Threat Invasive and Other Problematic Species, Genes and Diseases

IUCN Level 2 Threat: Invasive Non-native-Alien Species-Diseases

Severity: Severe **Actionability:** Actionable with difficulty

Notes: Probably the number one threat to char in Maine. Charr compete poorly with certain other fishes and illegal fish

introductions is a serious concern.

IUCN Level 2 Threat: Problematic Species-Diseases of Unknown Origin

Severity: Moderate Severity Actionability: Actionable with difficulty

Notes: Currently not an issue but the threat is always there

IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Air-Bourne Pollutants

Severity: Moderate Severity **Actionability:** Actionable with difficulty **Notes:** Acid precipitation and atmospheric deposition of pollutants is a concern.

IUCN Level 1 Threat Residential and Commercial Development

IUCN Level 2 Threat: Housing and Urban Areas

Severity: Moderate Severity Actionability: Actionable with difficulty

Notes: Green Lake population only

Species Level Conservation Actions Assigned to Arctic Charr:

*Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.

Conservation Action Category: Research Biological Priority: high Type: on-going

Investigate and describe all life history and life cycle requirements of each population to provide for maximum protection of each population

Priority 1 Species of Greatest Conservation Need (SGCN)

Class: Actinopterygii (Ray-finned Fishes)

Order: Salmoniformes (Salmon, Trout, And Whitefish)

Family: Salmonidae (Salmonids)

Stressor(s) Addressed By This Conservation Action

Tourism and Recreational Areas

Agricultural and Forestry Effluents

Air-Bourne Pollutants

Conservation Action

Category: Habitat Management

Biological Priority: high

Type: on-going

Report Date: January 13, 2016

Identify key aquatic habitats such as spawning sites and coordinate protection with federal, state, or NGOs and willing private landowners

Stressor(s) Addressed By This Conservation Action

Tourism and Recreational Areas

Agricultural and Forestry Effluents

Housing and Urban Areas

Conservation Action

Category: Habitat Management

Biological Priority: high

Type: on-going

Identify key terrestrial habitats connected or adjacent to aquatic habitats that are essential to maintaining viability of populations

Stressor(s) Addressed By This Conservation Action

Tourism and Recreational Areas

Agricultural and Forestry Effluents

Housing and Urban Areas

Conservation Action

Category: Species Management Biological Priority: high

Assess the utilization of charr by recreational anglers, including harvest rates and the attitudes of participating anglers

Stressor(s) Addressed By This Conservation Action

Tourism and Recreational Areas

Conservation Action Category: Species Management

Biological Priority: critical

Type: on-going

Type: on-going

Assess population status at each location where the species is present

Stressor(s) Addressed By This Conservation Action

Tourism and Recreational Areas

Agricultural and Forestry Effluents

Air-Bourne Pollutants

Guild Level Conservation Actions:

This Species is currently not attributed to a guild.

Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

Report Date: January 13, 2016

Priority 1 Species of Greatest Conservation Need (SGCN)

Class: Actinopterygii (Ray-finned Fishes)

Order: Salmoniformes (Salmon, Trout, And Whitefish)

Family: Salmonidae (Salmonids)

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.